Biographical Data

Lyndon B. Johnson Space Center Houston, Texas 77058



National Aeronautics and Space Administration

WILLIAM SURLES "BILL" MCARTHUR, JR., (COLONEL, USA, RET.) NASA ASTRONAUT

PERSONAL DATA: Born July 26, 1951, in Laurinburg, North Carolina. His hometown is Wakulla, North Carolina. Married to the former Cynthia Kathryn Lovin of Red Springs, North Carolina. They have two daughters. He enjoys basketball, running, and working with personal computers. Bill's stepfather, Mr. Weldon C. Avant, resides in Red Springs. His parents, Brigadier General William S. McArthur and Mrs. Edith P. Avant, are deceased. Cynthia's mother, Mrs. A.K. Lovin, resides in Red Springs, North Carolina.

EDUCATION: Graduated from Red Springs High School, Red Springs, North Carolina, in 1969; received a bachelor of science degree in applied science and engineering from the United States Military Academy, West Point, New York, in 1973, and a master of science degree in aerospace engineering from the Georgia Institute of Technology in 1983.



ORGANIZATIONS: Member of the American Institute of Aeronautics & Astronautics (AIAA), the Army Aviation Association of America, the Association of the United States Army, the United States Military Academy Association of Graduates, the West Point Society of Greater Houston, MENSA, Phi Kappa Phi, and the Association of Space Explorers.

SPECIAL HONORS: Recipient of the Distinguished Service Medal, the Defense Superior Service Medal, the Defense Meritorious Service Medal (First Oak Leaf Cluster), the Meritorious Service Medal (First Oak Leaf Cluster), the Army Commendation Medal, the NASA Space Flight Medal, and the NASA Exceptional Service Medal. Distinguished Graduate of the U.S. Army Aviation School. Honorary Doctor of Science degree from the University of North Carolina at Pembroke. Recipient of the Order of the Long Leaf Pine, North Carolina's highest civilian award. Georgia Tech Academy of Distinguished Engineering Alumni. 1996 American Astronautical Society Flight Achievement Award. 1997 visiting Green Honors Professor, Department of Science and Engineering, Texas Christian University. Recipient of the Ellis Island Medal of Honor. Order of Saint Michael (Silver Award) from the Army Aviation Association of America. 2000 Robert M. Leich Award from the Army Aviation Association Aeronautique Internationale.

EXPERIENCE: McArthur graduated from West Point in June 1973 and was commissioned as a Second Lieutenant in the U.S. Army. Following a tour with the 82nd Airborne Division at Fort Bragg, North Carolina, he entered the U.S. Army Aviation School in 1975. He was the top graduate of his flight class and was designated an Army aviator in June 1976. He subsequently served as an aeroscout team leader and brigade aviation section commander with the 2nd Infantry Division in the Republic of Korea. In 1978 he was assigned to the 24th Combat Aviation Battalion in Savannah, Georgia, where he served as a company commander, platoon leader, and operations officer. After completing studies at Georgia Tech, he was assigned to the Department of Mechanics at West Point as an assistant professor. In June 1987, he graduated from the U.S. Naval Test Pilot School and was designated an experimental test pilot. Other military schools completed include the Army Parachutist Course, the Jumpmaster Course, and the Command and General Staff Officers' Course.

McArthur retired from the Army in 2001.

A Master Army Aviator, he has logged over 4500 flight hours in 39 different air/spacecraft.

NASA EXPERIENCE: McArthur was assigned to NASA at the Johnson Space Center in August 1987 as a Space Shuttle vehicle integration test engineer. Duties involved engineering liaison for launch and landing operations of the Space Shuttle. He was actively involved in the integrated test of the flight control system for each Orbiter for its return to flight and was a member of the Emergency Escape and Rescue Working Group.

Selected by NASA in January 1990, McArthur became an astronaut in July 1991. Since then, McArthur has held various assignments within the Astronaut Office including: working issues relating to the solid rocket booster, redesigned solid rocket motor, and the advanced solid rocket motor. He served as Chief of the Astronaut Office Flight Support Branch, supervising astronaut support of the Mission Control Center, prelaunch Space Shuttle processing, and launch and landing operations. McArthur also served as Director of Operations, Russia, overseeing training activities for astronauts in Star City. A veteran of three space flights, McArthur has logged 35 days, 2 hours, 25 minutes and 10 seconds in space, including 13 hours and 16 minutes of EVA time in two space walks. McArthur served on the Expedition-10 backup crew.

McArthur is the Commander and ISS Science Officer on the Expedition-12 crew which launched from the Baikonur Cosmodrome in Kazakhstan on September 30, 2005 aboard a Soyuz TMA spacecraft and docked with the space station on October 3, 2005. McArthur will live and work aboard the International Space Station on a six-month tour of duty.

SPACE FLIGHT EXPERIENCE: STS-58 *Columbia* (October 18 – November 1, 1993) was launched from the Kennedy Space Center, Florida, and returned to land at Edwards Air Force Base, California. During the mission the crew performed neurovestibular, cardiovascular, cardiopulmonary, metabolic, and musculoskeletal medical experiments on themselves and 48 rats, expanding our knowledge of human and animal physiology both on earth and in space flight. In addition, the crew performed 16 engineering tests aboard the Orbiter *Columbia* and 20 Extended Duration Orbiter Medical Project experiments. Additionally, the crew made extensive contacts with school children and amateur radio operators around the world through the Shuttle Amateur Radio experiment. The STS-58 mission was accomplished in 225 orbits of the Earth in 336 hours, 13 minutes, 01 second.

STS-74 Atlantis (November 12-20, 1995) was NASA's second Space Shuttle mission to rendezvous and dock with the Russian Space Station *Mir*. STS-74 was launched from and returned to land at the Kennedy Space Center in Florida. During the 8-day flight the crew successfully attached a permanent docking module to *Mir*, conducted experiments on a number of secondary payloads, and transferred one and a half tons of supplies between Atlantis and *Mir*. The STS-74 mission was accomplished in 129 orbits of the Earth, traveling 3.4 million miles in 196 hours, 30 minutes, 44 seconds.

STS-92 *Discovery* (October 11-24, 2000) was launched from the Kennedy Space Center, Florida and returned to land at Edwards Air Force Base, California. During the 13-day flight, the seven-member crew attached the Z1 Truss and Pressurized Mating Adapter 3 to the International Space Station using Discovery's robotic arm and performed four space walks to configure these elements. This expansion of the ISS opened the door for future assembly missions and prepared the station for its first resident crew. McArthur's EVA time totaled 13 hours and 16 minutes. The STS-92 mission was accomplished in 202 orbits, traveling 5.3 million miles in 12 days, 21 hours, 40 minutes and 25 seconds.

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